

WBS	Description	FY03	FY03-LCG Contribution	FY04	FY04-LCG contribution	FY04 FTE (funded elsewhere)
2.2	Software (S. Rajagopalan)	12	2.6	12.95	3.5	25.4
2.2.1	Coordination	2	0.3	2	0.3	0
2.2.1.1	Software Project Coordination	1	0.1	1	0.1	
2.2.1.2	Data Management Coordination	1	0.2	1	0.2	
2.2.2	Core Services (D. Quarrie)	3.75		5.3	1.8	2.6
2.2.2.1	Framework (P. Calafiura)	3.25	1	2.6	1.6	0
2.2.2.1.1	Core Services & Program Flow	1.3	0.75	1.4	0.9	
2.2.2.1.2	User Interfaces	1	0.25	0.8	0.7	
2.2.2.1.3	Event Merging	0.2		0.2		
2.2.2.1.4	Calibration Infrastructure	0.75		0.2		
2.2.2.2	EDM Infrastructure (S. Rajagopalan)	0.5		1.2	0.2	0.4
2.2.2.2.1	Core Functionalities	0.2		0.2	0.2	0.2
2.2.2.2.2	Backend Services	0.1		0.4		
2.2.2.2.3	History Support	0		0.4		
2.2.2.2.4	Navigation Support	0.2		0.2		0.2
2.2.2.3	Detector Description (J. Boudreau)	0		1		0.6
2.2.2.3.1	Detector Element Identifiers					
2.2.2.3.2	Atlas Geometry Tool					
2.2.2.3.3	Geometry Browser					
2.2.2.3.4	DB support					
2.2.2.3.5	Geom. versioning & configuration			0.6		0.4
2.2.2.3.6	Integration suport			0.4		0.2
2.2.2.4	Graphics	0		0		0.1
2.2.2.5	Analysis Tools	0		0.3		1.5
2.2.2.6	Grid Integration	0		0.2		0
2.2.3	Database (D. Malon)	3.6	1.2	4.15	1.3	0.7
2.2.3.1	Database services & Servers	0.5	0.2	0.4	0.2	
2.2.3.1.1	Operation Support			0.3	0.2	
2.2.3.1.3	Database Administration			0.1		
2.2.3.1.6	Distributed Services			0		
2.2.3.2	Common Data Mgmt Software	1.1	0.3	1		0.2
2.2.3.2.1	Persistency Services	1.1	0.3	1		0.2
2.2.3.2.2	Concurrency Control			0		
2.2.3.2.3	Placement Services			0		
2.2.3.2.4	Dictionary Services			0		
2.2.3.2.5	Schema Management			0		
2.2.3.3	Event Store	0.3	0.2	1.15		
2.2.3.3.1	Event Databases	0.3	0.2	0.25	0.1	
2.2.3.3.2	Pileup support	0		0.2		
2.2.3.3.3	Persistent EDM	0		0.4		
2.2.3.3.4	Event Selection Support	0		0.3		
2.2.3.4	Non-Event Data Management	0.9		0.6		
2.2.3.4.1	Geometry & Primary Numbers	0.9		0.6		
2.2.3.4.2	Conditions & Configurations	0		0		
2.2.3.4.3	Calibration	0		0		
2.2.3.4.4	Time Validity Infrastructure	0		0		

2.2.3.5	Collections, Catalogs, Metadata	0.8	0.5	1	1	0.5
2.2.3.5.1	Event Collection Catalogs	0.5	0.5	0.5	0.5	
2.2.3.5.2	Event Level Metadata (tag db)	0.3		0.25	0.25	
2.2.3.5.3	File & replica catalogs	0		0.25	0.25	0.5
2.2.3.5.4	Transformation catalogs	0		0		
2.2.3.5.5	Metadata services	0		0		
2.2.3.5.6	Bookkeeping support	0		0		
2.2.4	Application Software	1.4		0.3		22.1
2.2.4.0	Coordination					4.2
2.2.4.1	Simulation	0.7		0.3		3.15
2.2.4.1.1	Geant3 simulation support	0.7		0.3		
2.2.4.1.2	Pixels					
2.2.4.1.3	TRT					
2.2.4.1.4	LAr Calorimeter					
2.2.4.1.5	Tile Calorimeter					
2.2.4.1.6	Muon System					
2.2.4.1.7	Radiation Backgrounds					
2.2.4.2	Subsystem Reconstruction	0.7				2.6
2.3.4.2.1	Pixels					
2.3.4.2.2	TRT					
2.3.4.2.3	Inner Detector Track Reconstruction					
2.3.4.2.4	LAr Calorimeter					
2.3.4.2.5	Tile Calorimeter					
2.3.4.2.6	Calorimeter Combined					
2.3.4.2.7	Muon System	0.7				
2.3.4.2.8	Inner Detector and Muon System					
2.2.4.3	Combined Reconstruction					2.85
2.2.4.3.1	e /Gamma					
2.2.4.3.2	Jets / ETmiss / Tau					
2.2.4.3.3	b - tagging					
2.2.4.3.4	Muon					
2.2.4.4	Analysis					3.6
2.2.4.5	Trigger					2.5
2.2.4.5.1	Level 1 Simulation					
2.2.4.5.2	Level 2 Reconstruction					
2.2.4.5.3	Level 3 Reconstruction					
2.2.4.6	Combined Testbeam Software					3.2
2.2.4.6.1	Simulation					
2.2.4.6.2	Reconstruction					
2.2.4.6.3	Online Monitoring					
2.2.5	Infrastructure Support	1.25	0.1	1.2	0.1	0
2.2.5.1	Software support	0.8	0.1	1	0.1	
2.2.5.2	QA/QC	0.2		0.2		
2.2.5.3	Training	0.25		0		